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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,488	08/27/2003	Joseph L. McJunkins	7041C	5867

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EXAMINER

SHOSHO, CALLIE E

ART UNIT PAPER NUMBER

1714

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/649,488	Applicant(s) MCJUNKINS ET AL.	
	Examiner Callie E. Shosho	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/11/05.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Handwritten signature

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishikawa et al. (U.S. 4,388,427).

Nishikawa et al. disclose ink comprising pigment, ink solvent including petroleum distillates, i.e. paraffinic hydrocarbon, and alkyd stabilized acrylic dispersion wherein the dispersion comprises alkyd resin obtained from triglyceride oil such as soybean oil or linseed oil, acrylic monomer including up to 30% hydroxy functional monomer, and chain transfer agent (col. 2, line 32, col.3, lines 1-7, 18-26, 27-29, 31-33, 39-43, and 55-58, col.4, lines 6-7, example 6, and Table 2). From example 6, it is calculated that the dispersion comprises approximately 76% non-volatile material.

In light of the above, it is clear that Nishikawa et al. anticipate the present claims.

3. Claims 1, 3, and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Wakimoto et al. (U.S. 3,734,872) taken in view of the evidence given in *Printing Paper & Inks*.

Wakimoto et al. disclose ink comprising pigment, ink solvent including naphtha, and alkyd stabilized acrylic dispersion wherein the dispersion comprises alkyd resin obtained from triglyceride oil such as soybean oil or sunflower oil, acrylic monomer including 1-30% hydroxy functional monomer, and oil (col.1, lines 17-21, col.2, lines 42-49 and 56-64, col.3, lines 15 and 70-72, col.6, lines 41-44, col.8, lines 37-42, and example 7). From example 9, it is calculated that the dispersion comprises, for instance, 72% non-volatile material (1252/1752).

Further, col.4, lines 54-59 disclose that the ratio of stabilizer/monomer present is 70/30 to 10/90 while col.7, lines 17-22 disclose that the ink comprises up to 50% pigment based on the amount of monomer present. Thus, it is calculated that the ink comprises 15-45 % ($0.5 \times 30 - 0.5 \times 90$) pigment while from example 7, it is seen that the ink comprises 70% (combined) dispersion and pigment and 25% varnish. Given that it is well known, as found in *Printing Paper & Inks* (page 224) that varnish comprises solvent, resin, and/or oil, it follows that the ink comprises up to 25% solvent.

In light of the above, it is clear that Wakimoto et al. anticipate the present claims.

4. Claims 1-2, 4-8, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 555503.

EP 555503 discloses composition comprising pigment, solvent including alcohols, esters, and ketones, and alkyd stabilized acrylic dispersion wherein the dispersion comprises 25-75% alkyd resin obtained from triglyceride oil such as linseed oil, soya oil, and sunflower oil, 25-75% acrylic monomer including 1-35% hydroxy-functional monomer, 0.1-6% chain transfer agent, and oil. It is further disclosed that the alkyd possesses z-average molecular weight of 10,000-

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250,000, non-volatile material in an amount greater than 75%, preferably at least about 90%, oil length of 65-85%, acid value less than 20, and viscosity less than 60,000 cP measured using Brookfield viscometer with #3 spindle at 12 rpm (page 2, lines 41-52, page 2, line 55-page 3, line 1, page 3, lines 5-14 and 40-45, page 4, lines 7-12, 15-20, and 30-32, page 4, line 53-page 5, line 6, page 5, lines 25 and 41-44, and example 5).

EP 555503 discloses that the above composition is used as coating composition or paint, not ink. While there is no disclosure that the composition is an ink as presently claimed, on the one hand, the broad disclosure of coating composition clearly encompasses inks which are applied to or coat paper. On the other hand, applicants attention is drawn to MPEP 2111.02 which states that "if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction". Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. ink, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art composition and further that the prior art structure which is

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identical to that set forth in the present claims, i.e. comprising pigment, alkyd stabilized acrylic dispersion, and solvent identical to those presently claimed, is capable of performing the recited purpose or intended use.

In light of the above, it is clear that EP 555503 anticipates the present claims.

5. Claims 1, 3, 9, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Amon et al. (U.S. 4,966,628).

Amon et al. disclose ink comprising 20-50 parts base comprising binder and 10-60 parts alkyd stabilized acrylic dispersion, 50-80 parts pigment, and no more than 12% solvent. The dispersion comprises, for instance, 80% non-volatile material (col.1, lines 8-13, col.7, lines 25-30 and 39-48, col.9, lines 25-43, and col.5, lines 48-51).

In light of the above, it is clear that Amon et al. anticipate the present claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa et al. (U.S. 4,388,427) or Wakimoto et al. (U.S. 3,734,872) either of which in view of EP 555503.

The disclosures with respect to Nishikawa et al. and Wakimoto et al. in paragraphs 2 and 3 above are incorporated here by reference.

The difference between Nishikawa et al. or Wakimoto et al. and the present claimed invention is the requirement in the claims of specific type of alkyd.

EP 555503, which is drawn to coating composition comprising non-aqueous alkyd stabilized acrylic dispersion, discloses the use of alkyd which possesses z-average molecular weight of 10,000-250,000, oil length of 65-85%, acid value less than 20, and viscosity less than 60,000 cP measured using Brookfield viscometer with #3 spindle at 12 rpm (page 4, lines 7-12 and 15-19). The motivation for using such alkyd is to formulate a dispersion with high non-

volatile material that is stable, non-gritty, filterable, and possesses low viscosity (page 3, lines 15-18).

It is noted that while EP 555503 broadly discloses that the alkyd stabilized acrylic dispersion are used in coating compositions (page 5, line 24), there is no disclosure that the alkyd is suitable for use in inks. On the one hand, the broad disclosure of coating composition clearly encompasses inks that are applied to or coat paper. On the other hand, as set forth in col. 1, lines 17-18 of Wakimoto et al., both paints and inks utilize alkyd stabilized acrylic dispersions. Thus, it is clear that alkyd stabilized acrylic dispersions suitable for use in paint, as disclosed by EP 555503, will also be suitable for use in inks, as disclosed by Nishikawa et al. or Wakimoto et al.

In light of the motivation for using specific type of alkyd disclosed by EP 555503 as described above, it therefore would have been obvious to one of ordinary skill in the art to use this alkyd in either Nishikawa et al. or Wakimoto et al., and thereby arrive at the claimed invention.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amon et al. (U.S. 4,966,628) in view of EP 555503 and Wakimoto et al. (U.S. 3,734,872).

The disclosure with respect to Amon et al. in paragraph 5 is incorporated here by reference.

The difference between Amon et al. and the present claimed invention is the requirement in the claims of viscosity of the alkyd stabilized acrylic dispersion.

EP 555503, which is drawn to coating composition comprising non-aqueous alkyd stabilized acrylic dispersion, discloses the use of dispersion possessing viscosity less than 60,000

cP measured using Brookfield viscometer with #3 spindle at 12 rpm (page 4, lines 7-12 and 15-19). The motivation for using such dispersion is to produce coating with excellent dry time (page 4, lines 20-21).

It is noted that while EP 555503 broadly discloses that the alkyd stabilized acrylic dispersion are used in coating compositions (page 5, line 24), there is no disclosure that the alkyd is suitable for use in inks. On the one hand, the broad disclosure of coating composition clearly encompasses inks that are applied to or coat paper. On the other hand, as set forth in col. 1, lines 17-18 of Wakimoto et al., both paints and inks utilize alkyd stabilized acrylic dispersions. Thus, it is clear that alkyd stabilized acrylic dispersions suitable for use in paint, as disclosed by EP 555503, will also be suitable for use in inks, as disclosed by Amon et al.

In light of the motivation for using alkyd stabilized acrylic dispersion with specific viscosity disclosed by EP 555503 as described above, it therefore would have been obvious to one of ordinary skill in the art to use dispersion with such viscosity in Amon et al. in order to produce ink with excellent dry time, and thereby arrive at the claimed invention.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Buter et al. (U.S. 5,721,294) and Kuwajima et al. (U.S. 4,518,724) each disclose alkyd stabilized acrylic dispersions, however, each references teaches using dispersion with less than 70% non-volatile material which is in direct contrast to the present claims.

Rao et al. (U.S. 4,983,716) and Pearson et al. (U.S. 5,348,992), similar to EP 555503, each disclose paint comprising pigment, solvent, and alkyd stabilized acrylic dispersion.

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WO 00/73392 discloses ink comprising hybrid alkyd-acrylic resin prepared by polymerizing acrylic monomer in the presence of alkyd, however, there is no disclosure of the amount of non-volatile material present as required in the present claims.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
8/18/05